KEMPEROL® AC

Work pack includes:
Component A: Grey Resin, Component B: Catalyst Powder

Product Description

KEMPEROL® AC is a two component, UV-stable high performance seamless and self terminating cold fluid applied methyl methacrylate membrane system used as an alternative to KEMPEROL® BR, V210, and 2K-PUR where same day application is required.

KEMPEROL® AC membranes can be surfaced with a light-reflective methyl methacrylate coating, sand aggregate surfacing or with other granular materials to match the appearance of the surrounding substrate.

Composition & Materials

A monolithic membrane is created in the field by combining the KEMPEROL® AC two-part, cold-applied liquid methyl methacrylate resin with Kemperol polyester reinforcing fleece. Membranes may be applied using standard fleece available in 4, 8, 10, 13, 20, 27, and 41-inch nominal widths.

Use

KEMPEROL® AC membranes are suitable for exterior waterproofing applications including plazas, balconies, terraces, park decks, and flashings.

Limitations

KEMPEROL® AC membrane may be applied when the ambient temperature is 35°F and rising, and the substrate temperature is a minimum of 5 degrees above the dew point. The maximum application temperature is approximately 85°F. Note: Viscosity increases with falling temperature.

Provide and maintain positive airflow over freshly applied KEMPEROL® AC materials during entire curing period to facilitate complete cure. Natural airflow is typically sufficient for exterior applications, but locations such as beneath large mechanical units, at inside corners, at the base of high walls, and other similar areas where stagnant air may occur should be provided with powered fans.

Yield

Using 165 Fleece: 33 sq. ft. (3.7 m^2) per 10 kg work pack
Using 120 Fleece: 41 sq. ft. (4.6 m^2) per 10 kg work pack

Note: All yields are approximate and may vary depending upon smoothness and absorbency of substrate.

Storage

Always store in cool and dry location. Do not store in direct sunlight or in a temperature below 35°F (1.7°C) or above 80°F (27°C). Approximate shelf life 12 months with proper storage. Catalyst Powder must be stored separately.

For best use, 24 hours before application, the material is to be acclimated at temperatures between 65-70 °F (18-21 °C).

Precautions

Refer to KEMPEROL® Material Safety Data Sheet (MSDS) before using or handling.

Surface Preparation

All surfaces must be free from gross irregularities, loose, unsound or foreign material such as dirt, ice, snow, water, grease, oil, release agents, lacquers, or any other condition that would be detrimental to adhesion of the primer and membrane. This requires careful preparation of existing horizontal and vertical substrates; cracks are filled, expansion joints are prepared, flashings are removed or modified, and termination points are determined. Substrates and penetrations are prepared to rigorous industry standards, and may require scarifying, sandblasting or grinding in some cases to achieve a suitable substrate.

Priming

After substrate preparation, temporary watertightness is quickly achieved with the application of KEMPERTEC® AC Primer and temporary joint filler. KEMPERTEC® AC primer may be brushed or

Component Properties

Property	Catalyst Powder	Component A
Color	White	Light Grey
Physical state	Granular	Liquid
Specific density	0.55	1.01
Viscosity	-	2270mPas
Flash point	365°F/180°C	50°F/10 °C

Membrane Properties

Physical Property	Values
Color	Light Grey
Physical state	Cures to solid
Thickness (165/200 fleece)	70 mils
VOC Content	32 g/l
Tensile strength @ break	90 lb/in
Elongation	50%
Tear resistance	N/A
Puncture resistance	150 lbs
Dimensional stability	0.05%
Water absorption	2.50%
Impact Resistance	Shore A:60
Water vapor transmission	.27 perms
Usage time*	15 minutes
Water resistant after*	35 minutes
Solid to walk on after*	60 minutes
Can be driven on after*	6 hours
Apply overburden after*	60 minutes
Apply coating/surfacing after*	60 minutes
Completely hardened*	6 hours
Crack spanning	4mm/.016 inch
Short-term temperature resistance	250°C / 482°F

** values obtained at 73°F, 50% relative humidity, may vary depending upon air flow, humidity and temperature.*

rolled onto any clean and prepared surface. Allow primer to cure completely prior to application of the KEMPEROL® membrane.

Mixing of Resin

Note: Prior to opening the containers of KEMPEROL® AC Resin, wear appropriate safety glasses and protect hands and wrists by wearing gauntlet-type neoprene gloves.

Step 1: Mix resin Component A with a spiral KEMPEROL® agitator, until the liquid is a uniform color, with no light or dark streaks present.

Step 2: Add the Catalyst Powder, Component B, to resin Component A and mix with the same agitator for 2 minutes or until the powder is completely mixed throughout the liquid resin. The amount of Catalyst Powder must be adjusted according to the temperature (see table).

Catalyst Powder Requirements

Material Temperature °F	Kemperol Catalyst Powder (100g/bag)	Pot Life (min)	Completely Cured
35°F - 50°F	4 bags	30	60
50°F - 70°F	3 bags	20	35
70°F - 85°F	2 bag	20	30
>85°F	1 bag	10	20

NOTE: KEMPEROL® AC is extremely fast curing. Excessive mixing time reduces the available working time for the Primer.

Application (165 Fleece)

Step 1: After the Resin is mixed, apply approx. gallons 4.5 gallons per 100 square feet (9 m^2). The resin should be rolled or brushed evenly onto the surface. Cover one working area at a time between 15 – 20 sq. ft.

Step 2: Then roll the KEMPEROL® Fleece directly into the resin, avoiding any folds and wrinkles. Use the roller to work the resin into the fleece, saturating from the bottom up. The appearance of the fleece should be a light opaque grey with no white spots. White spots are indications of unsaturated fleece or lack of adhesion. It is important to correct these faults before the resin cures.

Step 3: Add the top coat layer of Resin, approximately 2 gallons (7.5 L) per 100 square feet (9 m^2) and finish the fleece's saturation. Roll this final coating into the fleece, which will result in a glossy appearance. The fleece can only hold so much resin and all excess should be rolled forward to the unsaturated fleece. The correct amount of resin will completely saturate the fleece and no white color will be visible.

Surfacing

KEMPEROL® AC Membrane accepts KEMPERDUR® AC Finish in a smooth or aggregate finish for aesthetic or mechanical wear. Additionally, KEMPEROL® AC mineral filled topcoat system with an aggregate finish is available for pedestrian and vehicular traffic. KEMPEROL® AC membrane must be allowed to fully cure prior to the application of any surfacing materials, typically 60 minutes.

Disposal

Cured KEMPEROL® AC resin may be disposed of in standard landfills. This is accomplished by thoroughly mixing all components. Note: Uncured KEMPEROL® AC resin is considered a hazardous material and must be handled as such, in accordance with local, state and federal regulations. Do not throw uncured resin away.

Ordering Information

Liquid Component:
Item #:
336-77-001

Size:
Component A AC Resin
2.64 US GAL • 10 kg

Component B Catalyst Powder (when ordered with workpack):
2 -100 g plastic bags for 10 kg unit